

**STRUCTURAL RUBBER PRODUCTS
COMPANY, Appellant,**

v.

**PARK RUBBER COMPANY and Inter-
national Metals and Machines,
Inc., Appellees.**

Appeal No. 83-1326.

**United States Court of Appeals,
Federal Circuit.**

Nov. 9, 1984.

patent application was filed and that there was no "misrepresentation" to the Patent Office.

Structural argues that the district court erred in failing to grant its motion for judgment notwithstanding the verdict because there was no evidence to support the lack of novelty defense with respect to either patent. Park argues that the judgment should be upheld because of each of the defenses it asserted at trial, including lack of novelty and those which were rejected by the jury. Park also argues that the district court held that the inventions would have been obvious, thereby rejecting the jury's negative answers on this issue.

Since we conclude: (1) that the district court erred in denying Structural's motion; (2) that no final decisions were made on the remaining issues; and (3) that other legal errors appear from the record, we vacate the judgment and remand for a partial new trial.

I.

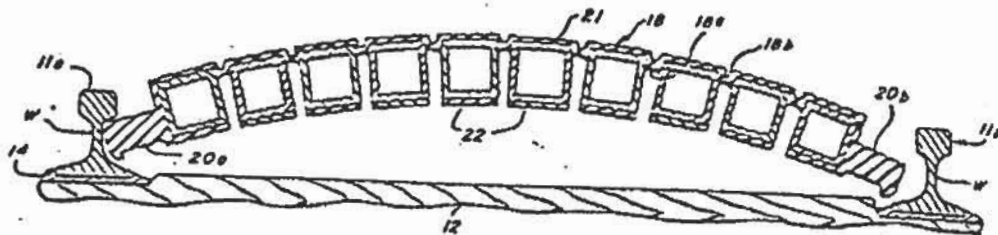
The Patents in Suit

NIES, Circuit Judge.

Structural Rubber Products Co. appeals from the judgment of the United States District Court for the Northern District of Illinois entered September 30, 1983, holding Park Rubber Company and International Metals and Machines, Inc., (collectively, Park) not liable for infringement of U.S. Patent Nos. 3,843,051 and 4,117,977, owned by appellant. The district court's judgment is based on invalidity of the patents for lack of novelty (35 U.S.C. § 102) in accordance with an answer given by a jury within a special verdict.

In answer to other specific questions, the jury found that Park infringed both patents and that neither the '051 nor '977 invention would have been obvious (35 U.S.C. § 103). With respect to '977, the jury further found that the invention had not been "on sale" or described in a printed publication more than one year before the

The two patents in suit are directed to highway railroad crossings having a moisture-proof traffic surface designed primarily to prevent the degradation of track subgrade. The crossing is formed by a number of rectangular tubes aligned in the direction of the train track, which are covered by a resilient waterproof lamina. The inventor named in the two patents in suit is Jacob Whitlock, an officer and principal shareholder of Structural. The first of the two patents, U.S. Patent No. 3,843,051, issued October 23, 1974, discloses a crossing formed of a middle section, which fits between the two rails, and two side sections, which run from the outer side of each rail to the main roadway. To insure a watertight seal between the rails and the crossing, the center section is oversized and must be bowed for insertion, thereby providing a compression fit as shown below:



The side portions (not illustrated above) are firmly anchored to the railroad ties at their outermost edge to prevent lateral movement and form a tight seal against the rail. To extend the crossing portions end-to-end down the track, an overlapping splicer piece is disclosed and claimed in the patent.

Claim 9, used during trial as representative of the invention, is reproduced below:

CLAIM 9, UNITED STATES
PATENT NO. 3,843,051

In a highway railway crossing having a pair of spaced substantially parallel rails secured to and supported by a plurality of transversely extending ties subtending said rails, a pair of elongated composite members arranged in abutting end-to-end relation and positionable between the rails and overlying a plurality of the rail supporting ties,

each composite member comprising a one-piece upper lamina of resilient moisture-proof material having recessed, compressible elongated side edges for resilient sealing engagement with web portions of the rails, a plurality of elongated reinforcing elements arranged in la-

terally spaced substantially parallel relation and affixed to the underside of the upper lamina,

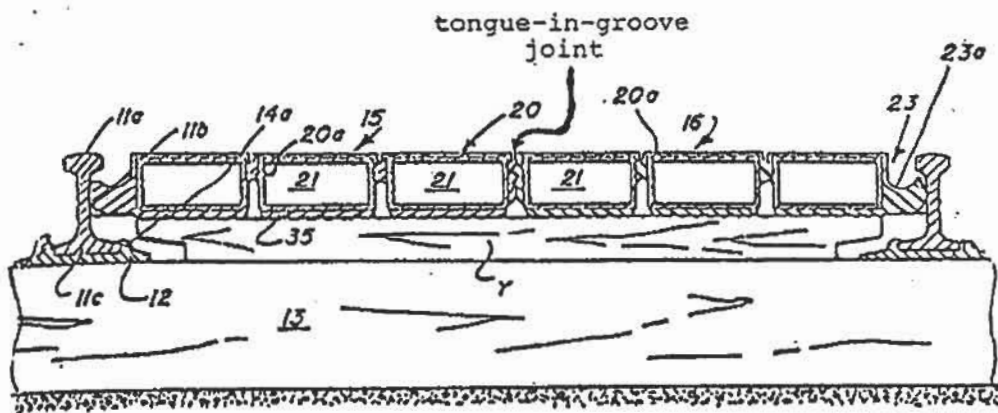
corresponding reinforcing elements of the pair of composite members being arranged in axially aligned relation,

a joint formed between the abutting composite members being aligned with a given tie, and

splicer means interconnecting the corresponding reinforcing elements, the splicer means for each pair of aligned reinforcing elements extending longitudinally of the elements a substantial distance in opposite directions from the joint.

The underscored portions are significant to our decision.

The second patent, U.S. Patent No. 4,117,977, issued October 3, 1978, discloses an improvement on the invention of the '051 patent. To facilitate the manufacture and installation of the crossing, the center section is divided into two halves. As shown below, an overlapping tongue-in-groove structure is present at the center joint to prevent any potential leakage:



The halves of the center section are oversized so that a compression seal is created at the junction of the halves, and between the outer edges of the halves and the rails. Representative claim 14, used at trial, is reproduced below:

CLAIM 14, UNITED STATES
PATENT NO. 4,117,977

In a highway crossing for a railroad wherein each of a pair of rails has a base section and a head section interconnected by a web section and wherein a plurality of spaced substantially parallel ties extend transversely of the rails and are secured thereto in subtending supporting relation, the combination comprising:

at least one pair of elongated laterally-resilient gage section units adapted to be arranged in side-by-side relation intermediate the rails, said units having corresponding elongated inner faces in abutting relation, at least one of said faces being of resilient material and the combined width of the adjacent units, prior to assembly, being slightly greater than the spacing between the web sections of said rails so as to provide, upon assembly, a resilient compressive fit between said units which forms an elongated substantially moisture-proof joint therebetween, each unit having

an elongated outer face adapted to be disposed adjacent the web section of a rail and in substantial engagement therewith and an inner face provided with projecting segments constructed unitary with the gage section unit that interfit in an elongated tongue-in-groove relationship with corresponding segments of the adjacent unit of said pair,

each gage section unit including a resilient moisture-proof upper lamina and reinforcing means affixed to said lamina,

the exposed surface of said lamina intermediate the outer and inner surface of a unit being adapted to define a plane substantially coplanar with the upper surfaces of said rail head sections.

Again, underscoring has been added to point out the elements of the claim which are principally in issue.

The Trial

The case was tried before a jury on patent, unfair competition and common law fraud counts. Structural charged Park, *inter alia*, with infringement of Claims 5, 9 and 11 of the '051 patent and Claims 1, 7, 8 and 10-15 of the '977 patent.¹ Park defended principally on the ground of non-infringement, but also asserted invalidity of the patents under § 102 (lack of novelty) and under 35 U.S.C. § 103 (obviousness).

was also resolved in Park's favor.

1. No appeal has been taken with respect to other counts of the complaint, each of which

With respect to '051, Park relied on the prior art considered by the patent examiner during prosecution and, in addition, two patents not cited during prosecution, U.S. Patent No. 2,828,079 to Rennels and U.S. Patent No. 1,191,561 to Burns. With respect to '977, Park's arguments were based primarily on the '051 patent, which is prior art to '977. Park also sought to prove that the '977 invention was invalid because of asserted "on sale" and "printed publication" defenses under 35 U.S.C. § 102(b), and because of alleged misrepresentation during prosecution of '977 before the Patent and Trademark Office (PTO). The two last mentioned defenses concern an advertisement for a grade crossing by Structural in *Railway Track and Structures*, a national trade magazine, published in May 1975, more than one year prior to the filing date of the '977 application, which Structural did not bring to the attention of the PTO.

The several patent issues, which were presented to the jury in the form of questions, were the following:

Questions on Patent Claims

	<u>'051 Patent</u>		<u>'977 Patent</u>	
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Has the Plaintiff established by a preponderance of the evidence:				
(1) that the Defendants infringed the patent?	X		X	
(2) that the Defendants are guilty of willful infringement of the patent?		X		X
If you find infringement, then you must consider the Defendants' defenses of patent invalidity and the following questions should be answered:				
Have the Defendants established by clear and convincing evidence:				
(1) that the claimed invention had been "on sale" more than one year before the patent application was filed	N/A	N/A		X
(2) that the claimed invention was described in a printed publication more than one year before the patent application was filed	N/A	N/A		X
(3) facts establishing that the claimed invention would have been "obvious"		X		X
(4) that the claimed invention was not "novel"	X		X	
(5) that there was "misrepresentation" to the Patent Office	N/A	N/A		X

Based on the answers of the jury indicated above, the court entered judgment in favor of Park. Structural filed a timely motion for a judgment notwithstanding the verdict (JNOV) under Rule 50(b), Fed.R. Civ.P., having previously moved for a directed verdict (Rule 50(a)). Alternatively, Structural requested a new trial (Rule 59(a)). Structural contended that there was *no* prior art reference which arguably could support the jury's verdict that either invention was not novel; that the jury's answers on the novelty, prior publication, on sale, and obviousness issues were inconsistent and showed that the jury was confused; and, finally, that the instruction and interrogatory on novelty were apparently misunderstood by the jury in a way which neither the parties nor the court anticipated.

The instruction on novelty drafted and given by the court reads as follows:

If the claimed invention is not novel, then the patent is invalid. By novel is meant that the invention should disclose something new, something which was not known at the time the invention was made. Once you have determined what the prior art is, you must compare that prior art with the invention defined by the claims of the patents in suit to determine whether the invention described by the claims is new in light of the prior art.

If the claim describes something found in the prior art, then the invention defined by the claim is not novel and the patent is invalid.

The district court denied the motion for JNOV on the novelty issue on the basis of "waiver", stating:

None of the court's instructions to the jury on the patent issues were objected to by the plaintiff. Many of the plaintiff's present complaints appear to argue with the legal standard applicable to the defense of novelty. Since the plaintiff did not object to the court's instructions on novelty, the plaintiff has waived any argument, direct or indirect, that the jury was misinformed about the law.

* * * * *

I recall inquiring of the parties whether a jury instruction on the issue of novelty was appropriate in the case *because of the absence of evidence on the issue*. When the issue was raised specifically to the parties, the defendant requested the instruction and the plaintiff did not object. . . .

In short, there has been a significant waiver during trial of the issues now raised post trial. *The novelty issue unquestionably was not a subject to which the parties devoted themselves during the trial*. But there was sufficient evidence in the record regarding prior art upon which the jury could conclude properly that the patents [sic, i.e., inventions] were not novel under the court's instructions to the jury. *The issue was for the jury*, and I am not persuaded to set aside the jury's verdict or to grant a new trial. [Emphasis added.]

With respect to Park's contingent motion for JNOV or a new trial on the basis of its defenses rejected by the jury, the court denied the motions as moot, stating:

[W]hile I am convinced that the plaintiff's patents were not valid because the claims were obvious, it would be a waste of judicial resources to reach this issue in light of the court's ruling on the plaintiff's motions.

On appeal, Park contends that the lack of novelty verdict is supported by substantial evidence, that the above statement by the court constitutes a holding by the district court of invalidity for obviousness, and that the merits of its other defenses would require a judgment in its favor.

Having noted the absence of evidence on novelty and having given Park the benefit of every reasonable factual inference, we conclude that the district court should have granted Structural's motion for judgment notwithstanding the verdict.

Structural argues that the remaining answers by the jury entitle it to a judgment that its patents are valid and infringed. For reasons discussed *infra*, however, we

decline to direct entry of judgment in favor of Structural. Rather, we remand for retrial of the issue of obviousness and such other issues as the trial court deems necessary, other than the defenses based on § 102.

II.

Fundamental to our decision here is the premise that jury trials must be conducted in such a manner as to produce *informed* and, thus, *fair* verdicts. As Judge Schwarzer has written in a comprehensive article, "Communicating with Juries: Problems and Remedies"²:

This situation confronts the bench and the bar with the challenge of ensuring that juries return verdicts conforming to both the law and the evidence. This challenge implicates all aspects of pre-trial and trial management, but the critical pressure point probably is the instructing (charging) of the jury. Prevailing practices of instructing juries are often so archaic and unrealistic that even in relatively simple cases what the jurors hear is little more than legal mumbo jumbo to them. Responsibility for the shortcomings of present practices must be shared by lawyers, trial courts, and appellate courts—lawyers for submitting self-serving, excessively long and argumentative instructions, trial judges for adhering to archaic practices out of fear of being reversed, and appellate courts for elevating legal abstractions over juror understanding.

Litigants have the right to have a case tried in a manner which ensures that factual questions are determined by the jury and the decisions on legal issues are made by the court, various techniques for accomplishing that objective being available under the Federal Rules of Civil Procedure (*Railroad Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1515, 220 USPQ 929, 938 (Fed.Cir.1984)), and under the inherent powers of the judge to control the course of a jury trial. F. James & G. Hazard, *Civil Procedure* 227-345 (1977). By the

2. 69 Calif.L.Rev. 731, 732 (1981).

same token, it is incumbent on the parties to present proper motions and/or requests to the trial court to exercise their rights under the Rules. On appeal, litigants can not expect to be heard for the first time on objections which could and should be raised in the trial court as to the conduct of the trial.³

As Judge Schwarzer indicates, the court's instructions to the jury, a matter which we will address in due course, are critical. However, during the course of a trial it is incumbent on the court to discern what material, factual issues are actually present in the case. This duty requires the court to have a working familiarity of the law applicable to the case before the trial begins.

It is inconceivable that litigants would expect a court to conduct a meaningful patent jury trial involving the issue of validity without working knowledge of the principles of *Graham v. John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545, 148 USPQ 459 (1966). Yet the record indicates specifically, not inferentially, that it was not until the arguments on the motions for JNOV that counsel indicated the importance of that case to the court. Had the trial begun with that enlightenment, we have little doubt that the court would have handled the trial in a substantially different manner.

Graham v. John Deere tells us, "[T]he ultimate question of patent validity is one of law." 383 U.S. at 17, 86 S.Ct. at 693, 148 USPQ at 467. This court has concluded from *Graham*, that at both the trial and appellate level of proceedings it is the responsibility of the court to be satisfied that the party challenging validity has properly carried its burden of overcoming

3. See *Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp.*, 739 F.2d 604, 615, 222 USPQ 654, 662 (Fed.Cir.1984). But see *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1364, 220 USPQ 763, 774 (Fed.Cir.1984) (plain error in instruction, not objected to, required new trial).

4. 35 U.S.C. 282 provides in pertinent part:

the statutory presumption of validity of a patent, 35 U.S.C. § 282⁴. *Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 762, 221 USPQ 473, 480 (Fed.Cir.1984). Validity encompasses three "separate tests of patentability": novelty, utility and nonobviousness. *United States v. Adams*, 383 U.S. 39, 48, 86 S.Ct. 708, 15 L.Ed.2d 572, 148 USPQ 479, 482 (1966). Thus, included within the presumption of validity is a presumption of novelty, a presumption of non-obviousness and a presumption of utility, each of which must be presumed to have been met. *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1567, 220 USPQ 97, 100 (Fed.Cir.1983).

As this court stated in *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1360, 220 USPQ 763, 771 (Fed.Cir.1984):

To summarize on this point, § 282 creates a presumption that a patent is valid and imposes the burden of proving invalidity on the attacker. That burden is constant and never changes and is to convince the court of invalidity by clear evidence. Deference is due the Patent and Trademark Office decision to issue the patent with respect to evidence bearing on validity which it considered but no such deference is due with respect to evidence it did not consider. All evidence bearing on the validity issue, whether considered by the PTO or not, is to be taken into account by the tribunal in which validity is attacked.

With this background we turn to the issues at hand.

III.

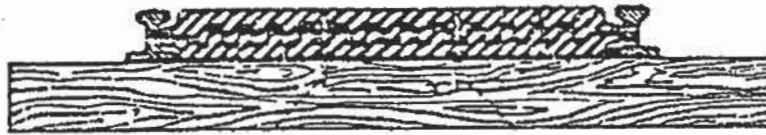
Novelty

The reference which Park contends supports the jury's verdict that the invention

A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.

of the '051 patent lacks novelty is U.S. Patent No. 2,828,079, issued to C.H. Ren-

nels, for a rubber railroad crossing as shown below:



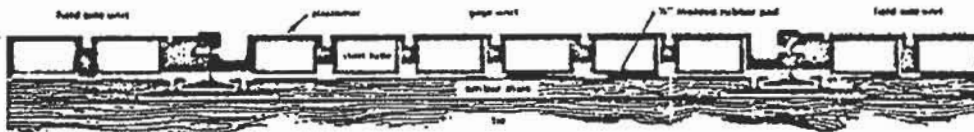
Rennels '079 discloses a crossing with a one-piece rubber center section which is reinforced by a corrugated metal plate, in contrast to the "plurality of elongated reinforcing elements" called for in the '051 claims. The specification of Rennels '079, however, states:

Those skilled in the art will also recognize that while a longitudinally corrugated reinforcing member such as shown here is preferred, it may be possible to alternately [sic] employ pipe, rods, I-beams, or other longitudinally positioned

members to enable the slab to support itself on spaced ties....

Admittedly, there is no disclosure in Rennels '079 of any "splicer means" element, as required by the claims in '051, for splicing sections "down the track."

With respect to '977, Park contends that anticipation is established by Rennels '079, by the '051 patent, or by the following advertisement which is also the basis for the asserted and rejected § 102(b) defenses:



Park admits that none of the references discloses a pair of side-by-side section units intermediate the rails that interfit with a tongue-in-groove joint, thus confirming the district court's recognition that there was "an absence of evidence on the [novelty] issue."

A review of the evidence set out above leaves no room for doubt that Structural's attack on the judgment was well founded and that its motion for JNOV should have been granted. This court has repeatedly stated that the defense of lack of novelty (*i.e.*, "anticipation") can only be established by a single prior art reference which discloses each and every element of

the claimed invention. *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed.Cir. 1984); *Radio Steel & Mfg. Co. v. MTD Products, Inc.*, 731 F.2d 840, 845, 221 USPQ 657, 661 (Fed.Cir.1984); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed.Cir.1983); *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed.Cir.1983); *SSIH Equipment, S.A. v. U.S. Int'l. Trade Comm'n.*, 718 F.2d 365, 377, 218 USPQ 678, 688 (Fed.Cir.1983).

The statutory language mandates such an approach.⁵ Section 102 speaks in terms

therefor, subject to the conditions and requirements of this title.

§ 102. *Conditions for patentability; novelty and loss of right to patent*

A person shall be entitled to a patent unless—

(a) *the invention was known or used by others in this country, or patented or describ-*

5. The parts of the patent statute (Title 35) pertinent to our analysis are the following (all emphasis ours):

§ 101. *Inventions patentable*

Whoever invents or discovers any *new* and useful process, machine, manufacture, or composition of matter, or any *new* and useful improvement thereof, may obtain a patent

of the invention having been known or used by others, or patented or described in a printed publication. Moreover, Section 103 provides that a patent may not be obtained "though the invention is not identically disclosed or described as set forth in Section 102" (emphasis added). In view of Park's admissions that no single prior art reference discloses each element of any claim of either '051 or '977, the defense of invalidity for lack of novelty fails as a matter of law.

Park characterizes the differences over the prior art here as "insubstantial" or "clearly obvious", and argues that the inventions, therefore, are not novel under the principles set forth in the concurring opinion in *In re Arkley*, 455 F.2d 586, 590, 172 USPQ 524, 528 (CCPA 1972) and responded to in *In re Schaumann*, 572 F.2d 312, 317, 197 USPQ 5, 10 (CCPA 1978). However, Park misconstrues the import of the discussion in these opinions. While the teaching in the prior reference need not be *ipsissimis verbis*, nevertheless, there must be a teaching with respect to the entirety of the claimed invention.⁶

Park argues that missing elements may be supplied by the knowledge of one skilled in the art or the disclosure of another reference, citing *In re Foster*, 343 F.2d 980, 145 USPQ 166 (CCPA 1965). Contrary to Park's view, *Foster* holds that a statutory time bar under § 102(b) may be invoked if the invention would have been obvious from a prior art reference. *Foster* involved an obviousness rejection (§ 103) based on combining a statutory time bar (§ 102(b)) and a prior art reference. Here,

ed in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or...

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

§ 103. Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title,

Park lost on both § 103 and § 102(b) defenses and, thus, can find no support in *Foster* on which to uphold the judgment.

Park's arguments are indistinguishable from statements made by the district court in *Connell v. Sears, Roebuck & Co.*, which this court rejected as follows:

The opinion says anticipation may be shown by less than "complete anticipation" if one of ordinary skill may in reliance on the prior art "complete the work required for the invention", and that "it is sufficient for an anticipation 'if the general aspects are the same and the differences in minor matters is only such as would suggest itself to one of ordinary skill in the art.'" Those statements relate to obviousness, not anticipation. Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim. *Soundscriber Corp. v. U.S.*, 360 F.2d 954, 960, 148 USPQ 298, 301 (Ct.Cl. 1966). A prior art disclosure that "almost" meets that standard may render the claim invalid under § 103; it does not "anticipate." Though it is never necessary to so hold, a disclosure that anticipates under § 102 also renders the claim invalid under § 103, for "anticipation is the epitome of obviousness," *In re Fracalossi*, 681 F.2d 792, 215 USPQ 569 (CCPA 1982). The reverse is not true, for the need to determine obviousness presumes anticipation is lacking.

722 F.2d at 1548, 220 USPQ at 198.

Thus, Park's arguments can not substitute for the absence of evidence of an anticipatory reference.

if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This case presents no issue of equivalency, which under the standard of *Tate Engineering, Inc. v. United States*, 477 F.2d 1336, 1342, 175 USPQ 115, 119 (Ct.Cl.1973), might result in a holding of anticipation.

Returning to the instruction on novelty, the court did not authorize the combining of references or supplementing a prior disclosure with knowledge in the art to find lack of novelty. From having read the instructions in their entirety, we conclude that the jury was confused, perhaps by the novelty instruction being preceded by an obviousness instruction which did refer to skill in the art with no clear distinction being drawn, to a layman, between them. The jury could have been misled, as well, by the unsupportable instruction that the invention is not novel if the claim describes "something found" in the prior art.

However that may be, the trial court erred in giving the jury the question of novelty on which there was *no evidence* arguably showing identity with a prior art disclosure and in failing to grant Structural's motion. As this court stated in *Nestier Corp. v. Menasha Corp.*, 739 F.2d 1576, 1579, 222 USPQ 747, 750 (Fed.Cir.1984): "In a jury trial, a court should not instruct on a proposition of law about which there is no competent evidence." See also *E.I. DuPont de Nemours v. Berkley & Co.*, 620 F.2d 1247, 1258-1261, 205 USPQ 1, 8-11 (8th Cir.1980) (Markey, C.J., sitting by designation).

In view of the absence of evidence to support the legal conclusion of invalidity based on lack of novelty of the '051 and '977 inventions, the judgment resting on that ground cannot stand.